Consumer Product Safety Commission

1631.33 Carpets and rugs with fire-retardant treatment.

1631.34 Small carpets and rugs not meeting acceptance criterion.

Subpart C—Washing Procedures

1631.61 Hide carpets and rugs—alternative washing procedure.

1631.62 Wool flokati carpets and rugs—alternative washing procedure.

Source: 40 FR 59935, Dec. 30, 1975, unless otherwise noted.

Subpart A—The Standard

AUTHORITY: Sec. 4, 67 Stat. 112, as amended, 81 Stat. 569–70; 15 U.S.C. 1193.

§ 1631.1 Definitions.

In addition to the definitions given in section 2 of the Flammable Fabrics Act, as amended (sec. 1, 81 Stat. 568; 15 U.S.C. 1191), and the procedures under that act for setting standards (part 1607 of this chapter), the following definitions apply for the purposes of this Standard:

- (a) Acceptance Criterion means that at least seven out of eight individual specimens of a small carpet or rug shall meet the test criterion as defined in this Standard.
- (b) Test Criterion means the basis for judging whether or not a single specimen of small carpet or rug has passed the test, i.e., the charred portion of a tested specimen shall not extend to within 2.54 cm. (1.0 in.) of the edge of the hole in the flattening frame at any point.
- (c) Small Carpet means any type of finished product made in whole or in part of fabric or related material and intended for use or which may reasonably be expected to be used as a floor covering which is exposed to traffic in homes, offices, or other places of assembly or accommodation, and which may or may not be fastened to the floor by mechanical means such as nails, tacks, barbs, staples, adhesives, and which has no dimension greater than 1.83 m. (6 ft.) and an area not greater than 2.23 m.2 (24 sq. ft.). Products such as "Carpet Squares" with dimensions smaller than these but intended to be assembled, upon installation, into assemblies which may have dimensions greater than these, are ex-

cluded from this definition. They are, however, included in the Standard for the surface flammability of carpets and rugs (FF 1–70) (subpart A of part 1630 of this chapter). Mats, hides with natural or synthetic fibers, and other similar products are included in this definition if they are within the defined dimensions, but resilient floor coverings such as linoleum, asphalt tile and vinyl tile are not.

- (d) Small Rug means, for the purposes of this Standard, the same as small carpet and shall be accepted as interchangeable with small carpet.
- (e) *Traffic Surface* means a surface of a small carpet or rug which is intended to be walked upon.
- (f) Timed Burning Tablet (pill) means a methenamine tablet, flat, with a nominal heat of combustion value of 7180 calories/gram, a mass of 150 mg ±5mg and a nominal diameter of 6mm.
- (g) Fire-Retardant Treatment means any process to which a small carpet or rug has been exposed which significantly decreases the flammability of that small carpet or rug and enables it to meet the acceptance criterion of this Standard.

[40 FR 59935, Dec. 30, 1975, as amended at 72 FR 60767, Oct. 26, 2007]

§ 1631.2 Scope and application.

- (a) This Standard provides a test method to determine the surface flammability of small carpets and rugs when exposed to a standard small source of ignition under carefully prescribed draft-protected conditions. It is applicable to all types of small carpets and rugs used as floor covering materials regardless of their method of fabrication or whether they are made of natural or synthetic fibers or films, or combinations of, or substitutes for these.
- (b) One of a kind small carpet or rug, such as an antique, an Oriental or a hide, may be excluded from testing under this Standard pursuant to conditions established by the Consumer Product Safety Commission.

§ 1631.3 General requirements.

(a) Summary of test method. This method involves the exposure of each of eight conditioned, replicate specimens of a small carpet or rug to a

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standard igniting source in a draft-protected environment and measurement of the proximity of the charred portion to the edge of the hole in the prescribed flattening frame.

- (b) *Test criterion*. A specimen passes the test if the charred portion does not extend to within 2.54 cm. (1.0 in.) of the edge of the hole in the flattening frame at any point.
- (c) Acceptance criterion. At least seven of the eight specimens shall meet the test criterion in order to conform with this Standard.

§1631.4 Test procedure.

(a) Apparatus—(1) Test chamber. The test chamber shall consist of an open top hollow cube made of noncombustible material 1 with inside dimensions $30.48\times30.48\times30.48$ cm. $(12\times12\times12$ in.) and a minimum of 6.35 mm. $(\frac{1}{4}$ in.) wall thickness. The flat bottom of the box shall be made of the same material as the sides and shall be easily removable. The sides shall be fastened together with screws or brackets and taped to prevent air leakage into the box during use.

NOTE: A minimum of two chambers and two extra bottoms is suggested for efficient operation.

- (2) Flattening frame. A steel plate, 22.86×22.86 cm. (9 × 9 in.) 6.35 mm. ($\frac{1}{4}$ in.) thick with a 20.32 cm. (8 in.) diameter hole in its center is required to hold the specimen flat during the course of the test. It is recommended that one be provided for each test chamber.
- (3) Standard igniting source. A methenamine tablet, flat, with a nominal heat of combustion value of 7180 calories/gram, a mass of 150 mg ±5 mg and a nominal diameter of 6mm. These tablets shall be stored in a desiccator over a desiccant for 24 hours prior to use. (Small quantities of absorbed water may cause the tablets to fracture when first ignited. If a major fracture occurs, any results from that test shall be ignored, and it shall be repeated.)
- (4) Test specimens. Each test specimen shall be a 22.86×22.86 cm. (9×9 in.) section of the small carpet or rug to be tested. Eight specimens are required.
- 16.35 mm. (1/4 in.) cement asbestos board is a suitable material

- (5) Circulating air oven. A forced circulation drying oven capable of removing the moisture from the specimens when maintained at 105 °C. (221 °F.) for 2 hours.²
- (6) Desiccating cabinet. An airtight and moisture tight cabinet capable of holding the floor covering specimens horizontally without contacting each other during the cooling period following drying, and containing silica gel desiccant.
- (7) Gloves. Nonhygroscopic gloves (such as rubber or polyethylene) for handling the sample after drying and raising the pile on specimens prior to testing.
- (8) Hood. A hood capable of being closed and having its draft turned off during each test and capable of rapidly removing the products of combustion following each test. The front or sides of the hood should be transparent to permit observation of the tests in progress.
- (9) *Mirror*. A small mirror mounted above each test chamber at an angle to permit observation of the specimen from outside the hood.
- (10) Vacuum cleaner. A vacuum cleaner to remove all loose material from each specimen prior to conditioning. All surfaces of the vacuum cleaner contacting the specimen shall be flat and smooth.
- (b) Sampling—(1) Selection of samples. (i) Select a sample of the material representative of the lot and large enough to permit cutting eight test specimens 22.86×22.86 cm. (9 \times 9 in.) free from creases, fold marks, delaminations or other distortions. The representative sample of material may require the use of more than one small carpet or rug. The test specimens should contain the most flammable parts of the traffic surface at their centers. The most flammable area may be determined on the basis of experience or through pretesting.

²Option 1 of ASTM D 2654-67T, "Methods of Test for Amount of Moisture in Textile Materials," describes a satisfactory oven. ("1969 Book of ASTM Standards," part 24, published by the American Society for Testing and Materials, 1916 Race Street, Philadelphia. PA 19103.)